



# Cisco MGM Installation

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Cisco MGM is based on the Cisco EMF, which operates in a distributed environment using a server and clients. This chapter describes the deployment options, software components, hardware requirements, and installation procedures for Cisco MGM, and identifies the Cisco EMF options that are important when installing Cisco MGM.

This chapter covers the following topics:

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- Installing Cisco MGM Clients, page 2-7
- Changing the Installation, page 2-8
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## Deployment Options

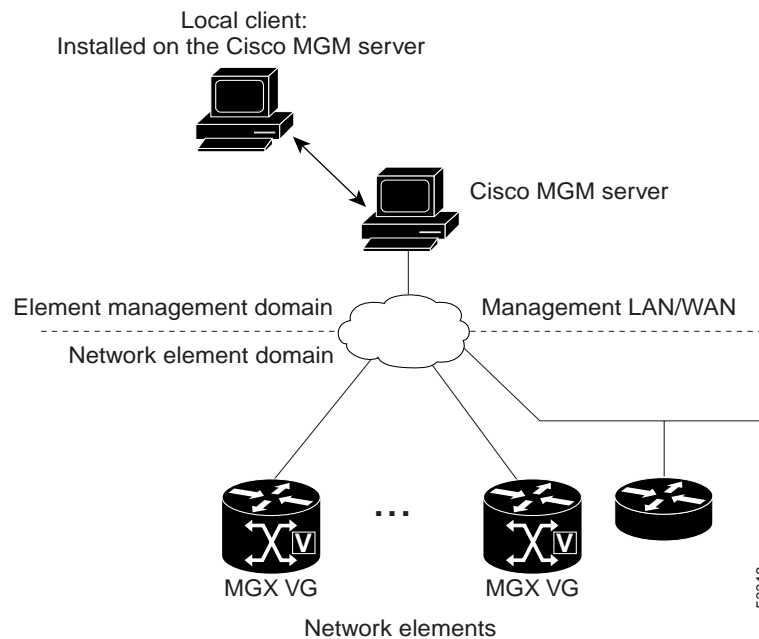
You deploy Cisco MGM as a server with clients in a distributed environment. The following types of deployment are available:

- Server with local client (see Figure 2-1). A client can be local or remote. A local client is one that is running on the Server itself.
- Server with local and remote clients (see Figure 2-2). A remote client is running on a separate Sun workstation.

## Server with Local Client

Every deployment includes Cisco EMF Server and Cisco MGM extensions. Processes on the server keep track of the current state of the network, user access, events, and so on. The Cisco EMF clients provide the user interface to the system. When you install a Cisco EMF Server, you automatically add a local client (see Figure 2-1).

*Figure 2-1 Server With Local Client*



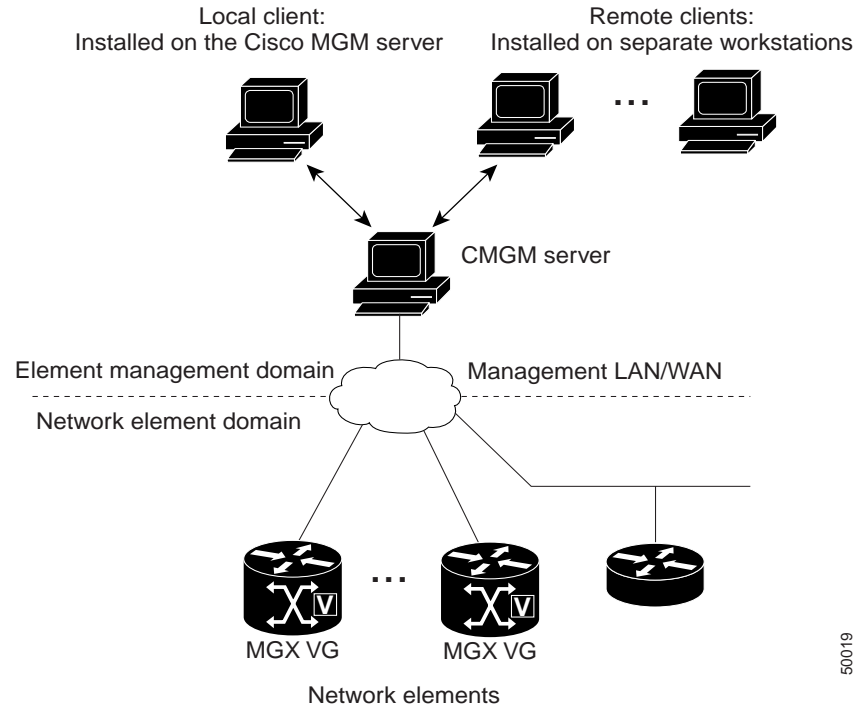
**Note**

You can also log onto the system from a PC running x-window emulation software, such as ReflectionX v7.20 or Exceed v6.1.

## Server with Remote Clients

A Cisco EMF deployment may have additional clients installed on separate workstations (see Figure 2-2). A client installation retrieves management information from the Cisco EMF Server and displays it on the user interface. Using clients that run on separate hosts frees system resources on the server and improves overall performance. Typically, you can install client software from a local CD ROM drive and do not need to mount files across a network.

*Figure 2-2 Server with Remote Clients*



## System Requirements

This section describes the platform and software requirements for a Cisco MGM system.

## Platform Requirements

The platform resources you need depend on the number of Cisco MGX 8260 Media Gateways and their configurations. A basic installation requires 2 GB of free disk space in a file system (for example /opt) for Cisco EMF and Cisco MGM.

*Table 2-1 Minimum Platform Requirements*

Resource	Cisco MGM Server	Cisco MGM Client
Hardware	Sun Ultra 60 Workstation	Sun Ultra 5 workstation
Operating system	Solaris 2.6 with CDE 1.3 or SunOS 5.6	Solaris 2.6 with CDE 1.3 or SunOS 5.6
Memory	1 GB RAM	256MB RAM
Disk space	Four hard disks, 9GB or larger <sup>1</sup>	One hard disk, 9GB or larger
Processor	Two x 360Mhz	333Mhz
Swap space	2GB	2GB
Monitor	17" color	17" color
Graphics card	24bit	24bit
CD ROM	Local or remote	Local or remote

1. Do not substitute a smaller number of larger drives.

Allocate the server's hard disks as follows:

- Database and transaction log (2 drives)
- Solaris operating system and swap space (1 drive)
- Cisco MGM and Cisco EMF software, including the Cisco EMF database (1 drive)

A Cisco MGM server supports 5 concurrent Cisco MGM user sessions. Cisco MGM clients can support 5 additional users. Therefore, the maximum number of concurrent users for a client/server configuration is 10. Each MGX 8260 chassis supports 5 concurrent Cisco WebViewer sessions.



**Note**

OpenWindows is not supported on Cisco EMF.

## Software Requirements

You need the following software for this installation:

- Cisco EMF version 3.1
- Cisco MGM version 1.0
- Netscape 4.5 for Solaris (for Cisco WebViewer)
- Cisco MGX 8260 Media Gateway, software version 1.2
- Cisco Voice CORBA Gateway version 1.0 (optional)

# Installing the Cisco MGM Server

To install the server, perform these major steps:

- 
- Step 1 Install the Netscape browser.
  - Step 2 Install Cisco EMF server.
  - Step 3 Configure RAW partitions.
  - Step 4 Install Cisco MGM server.
- 

## Installing a Netscape Browser

Cisco WebViewer requires a full installation of the Netscape browser to operate correctly. Refer to the Netscape documentation for installation procedures.

Record the path to the Netscape executable; you use this information when installing Cisco MGM.

## Installing Cisco EMF Server Software

Install and start Cisco EMF according to the procedures in the *Cisco Element Management Framework Installation and Administration Guide*.



Note

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Answer No when the installation scripts asks if you want to use a RAW partition.

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## Configuring Raw Partitions

Perform this procedure after installing Cisco EMF if you want to use a raw file partition for the database and database transaction log.

To configure a raw partition, follow these steps:

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- Step 1 Log in as the root user.
  - Step 2 Configure one or more disk drive for raw partitioning using the UNIX format command. Consult with your system administrator if you are not familiar with this command.
  - Step 3 Stop the Cisco EMF server:  

```
<CEMF_ROOT>/bin/cemf stop
```

where CEMF\_ROOT is the CEMF installation directory
  - Step 4 Stop ObjectStore:  

```
/etc/rc2.d/s80ostore4 stop
```
  - Step 5 Stop the AV License Manager:  

```
/etc/rc2.d/s98avlm stop
```

**Step 6** Start a Cisco EMF shell:

```
<CEMF_ROOT>/bin/cemf shell
```

**Step 7** Edit the host name server parameters file, as follows:

a. Using a text editor, open the hostname server parameters file in

```
<CEMF_ROOT>/ODI/OS5.1/ostore/etc
```

b. Comment out the line for the transaction.log. This places the log in a raw partition.

c. Add an entry for each raw partition that ObjectStore uses. Each entry is of the format:

```
Partition<X>: PARTITION <raw partition drive name>
```

where X is an integer starting at 0 for the first partition and incrementing 1 for each subsequent entry.

The raw partition name can be of the format /dev/rdisk/c2t9d0s0.

For example:

```
#Log File: /opt/transact.log
Partition0: PARTITION /dev/rdisk/c2t9d0s0
Partition1: PARTITION /dev/rdisk/c2t10d0s0
```

**Step 8** Reinitialize ObjectStore:

```
<CEMF_ROOT>/ODI/OS5.1/ostore/lib/osserver -i
```

**Step 9** Reset the Cisco EMF database:

```
<CEMF_ROOT>/bin/cemf reset
```

**Step 10** Start CEMF:

```
<CEMF_ROOT>/bin/cemf start
```

The system resumes normal operation.

## Installing Cisco MGM Server Software

Before installing Cisco MGM server software, uninstall any previous Cisco MGM versions. For more information, see *Uninstalling Cisco MGM Server or Client*, page 2-9.

To install the Cisco MGM server, follow these steps:

**Step 1** Log in as the root user.

**Step 2** Change to the cmgm1.0pkg package directory on the CD ROM.

```
cd <CDROM>/cmgm1.0pkg
```

**Step 3** Start the installation script.

```
./cmgminstall
```



**Tips** To get help, enter cmgminstall -h

- Step 4** Follow the onscreen instructions, considering the following guidelines:
- When prompted for the type of installation, select a **cmgmpkg Server Package** option.
  - When prompted for the path of the Netscape browser, use the full path of the Netscape browser rather than the path to the Cisco EMF browser.
  - When prompted for trap forwarding, answer Yes if you want to forward MGX8260 traps to a remote management system, otherwise answer No. You can change this decision later.



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**Note** Make sure you specify the full and correct path to Netscape; it's difficult to change later.

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- Step 5** Check the installation log for errors. The log file is in the following location:

```
/var/adm/Atlantech/avinstall/cmgmpkg_Server_Package/logfile
```

- Step 6** Verify that the cmgmCtrl process is running. For example:

```
/opt/cemf/bin/cemf query
```

The Cisco MGM plugin automatically starts on Cisco EMF.

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## Installing Cisco MGM Clients

To install the client, perform these major steps:

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- Step 1** Install the Netscape browser.
- Step 2** Install the Cisco EMF client.
- Step 3** Install the Cisco MGM client.
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## Installing a Netscape Browser

Cisco WebViewer requires a full installation of the Netscape browser to operate correctly. Refer to the Netscape documentation for installation procedures.

Record the path to the Netscape executable; you use this information when installing the Cisco MGM client.

## Installing Cisco EMF Client Software

Before installing a client, remove any previous Cisco MGM client versions. For more information, see Uninstalling Cisco MGM Server or Client, page 2-9.

To install Cisco MGM client, follow these steps:

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- Step 1** Log in as the root user.
-

**Step 2** Change to the cmgm1.0pkg package directory on the CD ROM.

```
cd <CDROM>/cmgm1.0pkg
```

**Step 3** Start the installation script.

```
./cmgminstall
```



**Tips**

To get help, enter cmgminstall -h

**Step 4** Follow the onscreen instructions, considering the following guidelines:

- When prompted for the type of installation, select a **cmgmpkg Client Package** option.
- When prompted for the path of the Netscape browser, use the full path of the Netscape browser rather than the path to the Cisco EMF browser.



**Note**

Make sure you specify the full and correct path to Netscape; it's difficult to change later.

**Step 5** Check the installation log for errors. The log file is in the following location:

```
/var/adm/Atlantech/avinstall/cmgmpkg_Client_Package/logfile
```

The Cisco MGM client automatically starts.

## Changing the Installation

Cisco MGM includes scripts and options for updating trap information, viewing software information, and uninstalling software.

## Updating Trap Forwarding

To enable trap forwarding to other hosts, follow these steps:

**Step 1** Log in as the root user.

**Step 2** Change to the directory for scripts.

```
cd <CEMF_ROOT>/config/scripts/cmgm
```

**Step 3** Run the installation script.

```
./updTrapForward
```



**Tips**

To get help, enter updTrapForward -h

**Step 4** Change to the directory for executables.

```
cd <CEMF_ROOT>/bin
```



Step 5 Restart Cisco EMF.

```
cemf stop
cemf start
```

The system begins forwarding traps.

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## Viewing Software Version Information

To view software version information, follow these steps:

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Step 1 Log in as the root user.

Step 2 Change to the directory for the installation script.

```
cd <CEMF_ROOT>/config/scripts/cmgm
```

Step 3 Run the installation script with the -s option.

```
./cmgminstall -s
```

The script displays software information

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## Uninstalling Cisco MGM Server or Client

When you uninstall the server, you also remove the client from the same host. On a client machine, the script just removes the client software.

To remove Cisco MGM, follow these steps:

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Step 1 Log in as the root user.

Step 2 Change to the scrip directory.

```
cd <CEMFROOT>/config/scripts/cmgm
```

Step 3 Run the deinstallation script.

```
./cmgminstall -r
```

Step 4 If you receive a "port not ready" message, repeat step 3. If the problem persists, contact technical support.

Step 5 Check the installation log for errors. The server log file is in the following location:

```
/var/adm/Atlantech/avinstall/cmgmprg_Server_Package/logfile
```

The client log file is in the following location:

```
/var/adm/Atlantech/avinstall/cmgmprg_Client_Package/logfile
```

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## Initializing Cisco MGX 8260 Media Gateway Nodes

For the Cisco MGM to communicate with Cisco MGX 8260 Media Gateways, initialize the following parameters for each MGX 8260 chassis.

- Management IP address
- Site name (sysLocation parameter)
- Community strings
- Trap registrations

You can configure these settings using the CLI or Cisco WebViewer. Nodes usually have an IP address and site name (sysLocation parameter) configured, but you may need to initialize SNMP communities and register traps. Check with your system administrator before assigning or changing IP addresses.